DM.100

- CONTRÔLE DE DÉPASSEMENT DE PISTONS
- PISTON PROTRUSION TEST
- KONTROLLE DES KOLBENÜBERSTANDS
- CONTROLE VAN DE AXIAALSPELING VAN DE ZUIGERS
- CONTROL DE SOBREPASAMIENTO DE LOS PISTONES
- CONTROLLO DI SORPASSO DEI PISTONI

Livret de valeur
Value booklet
Datenliste
Waardenlijst
Libreta de valor
Libretto del valore

TA-DM.100/97

FACOM®

Mesure du dépassement des pistons

F

1. Consulter le manuel de réparation du constructeur du véhicule.
2. Nettoyer la tête des pistons pour éliminer les dépôts de calamine.
3. Monter et fixer le comparateur sur le support.
4. Etalonner le comparateur à zéro sur le disque de référence.
5. Tourner le vilebrequin dans les sens de rotation ↻ pour amener le piston n° 1 proche du point mort haut (PMH).
6. Placer le support au dessus du cylindre n°1 en s'assurant que la touche du comparateur se situe au centre du piston *(s'aider des repères fixes sur les branches du support)*.
7. Tourner le vilebrequin, sens de rotation ↻ et relever la valeur de dépassement du piston au PMH *(instant de déviation de l'aiguille sur le comparateur)*.
8. Répéter l'opération sur les autres pistons *(noter les valeurs)*.

⚠ Seule la valeur maximum relevée sera prise en compte pour le choix de l'épaisseur du joint de culasse.

Messung des Kolbenüberstands

D

1. Herstellerangaben im Reparaturhandbuch beachten.
2. Kolbenköpfe von Verbrennungsrückstände befreien.
3. Komparator zusammensetzen und auf dem Träger befestigen.
4. Komparator mit Hilf der Referenzscheibe auf Null einstellen.
5. Die Kurbelwelle in Drehrichtung ↻ drehen, um den Kolben Nr. 1 bis in die Nähe des oberen toten Punktes (OTP) zu bringen.
6. Den Träger auf den Zylinder Nr. 1 aufsetzen, wobei darauf zu achten ist, daß sich der Kontaktstift des Komparators im Zentrum des Kolbens befindet (*man richte sich hierbei nach den festen Markierungen auf den Armen des Trägers*).
7. Die Kurbelwellen in Drehrichtung ↻ drehen und den Wert des Kolbenüberstands am OTP ablesen *(Auslenkung des Zeigers auf dem Komparator)*.
8. Den Vorgang bei den anderen Kolben wiederholen *(die Werte aufschreiben)*.

⚠ Bei der Wahl der Dicke der Zylinderkopfdichtung ist nur der größte abgelesene Wert zu berücksichtigen.

Medida del sobrepasamiento de los pistones

E

1. Consultar el manual de reparación del constructor del vehículo.
2. Limpiar la cabeza de los pistones para eliminar los depósitos de calamina.
3. Montar y fijar el comparador sobre el soporte.
4. Calibrar el comparador a cero sobre el disco de referencia.
5. Girar el cigüeñal en el sentido de rotación ↻ para llevar el pistón nº 1 cerca del punto muerto superior (PMS).
6. Poner el soporte por encima del cilindro nº 1 asegurándose de que la tecla del comparador se sitúa en el centro del pistón *(para ello, utilizar las marcas fijas en los brazos del soporte)*.
7. Girar el cigüeñal en el sentido de rotación ↻ y leer el valor de sobrepasamiento del pistón en el PMS (instante de desviación de la aguja sobre el comparador).
8. Repetir la operación en los demás pistones (anotar los valores).

⚠ Sólo se tendrá en cuenta el valor máximo leído para la elección del espesor de la junta de la culata.

Measurement of piston protrusion

GB

1. Consult the vehicle manufacturer repair manual.
2. Clean the piston head to remove any deposits of scale.
3. Assemble and attach the comparator to the support.
4. Calibrate the comparator on zero using the reference disk.
5. Turn the crankshaft in the direction of rotation ↻ to bring piston No. 1 close to the upper dead center (UDC).
6. Place the support above cylinder No. 1 making sure that the comparator contact is at the centre of the piston (*use the fixed references on the support arms*).
7. Turn the crankshaft in direction of rotation ↻ and measure the protrusion value of the piston at the UDC *(when the pointer deflects on the comparator)*.
8. Repeat the operation on other pistons *(note the values)*.

⚠ Only the maximum value read will be taken into consideration in choosing the thickness of the cylinder head gasket

Meting van de axiaalspeling van zuigers

NL

1. Raadpleeg het werkplaatshandboek van de fabrikant.
2. Reinig de zuigerbodem en verwijder koolafzetting.
3. Monteer en bevestig de meetklok op de steun.
4. Stel de meetklok op nul t.o.v. de referentieschijf.
5. Draai de krukas in de draairichting ↻ om zuiger 1 in de nabijheid van het bovenste dode punt te brengen (BDP).
6. Plaats de steun boven cylinder 1 en zorg dat de stift van de meetklok zich in het midden van de zuiger bevindt *(maak gebruik van de merktekens op de armen van de steun)*.
7. Draai de krukas in de draairichting ↻ en noteer de waarde van de axiaalspeling van de zuiger op het BDP *(moment van uitslaan van de wijzer op de meetklok)*.
8. Herhaal deze handelingen voor de overige zuigers *(noteer de waarden)*.

⚠ Alleen de hoogste gemeten waarde is van belang voor de keuze van de dikte van de koppakking.

Misura di sorpasso dei pistoni

I

1. Consultare il manuale di riparazione del costruttore del veicolo.
2. Pulire la testa dei pistoni per eliminare i depositi di calamina.
3. Montare e fissare il comparatore sul supporto.
4. Calibrare il comparatore a zero sul disco di riferimento.
5. Girare il trapano nel senso della rotazione ↻ per portare il pistone n° 1 vicino al punto morto alto (PMA).
6. Posizionare il supporto sopra il cilindro n° 1 facendo attenzione che il tasto del comparatore si trovi al centro del pistone *(aiutarsi con i punti fissi sui bracci di supporto)*.
7. Girare il trapano nel senso di rotazione ↻ e rilevare il valore di sorpasso del pistone PMA *(istante di deviazione dell'ago sul comparatore)*.
8. Ripetere l'operazione sugli altri pistoni *(annotare i valori)*.

⚠ Solo il valore massimo trovato sarà preso in considerazione per la scelta dello spessore della guarnizione della testa del cilindro.

FACOM®

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ALFA ROMEO

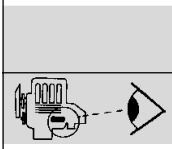
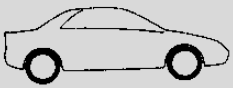
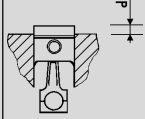
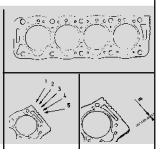
	Ø	cm³	95		P		
160 A6 (FIAT) (t)	82.6	1929	94 →	145 TD 1.9 TD 146 TD 1.9 TD 155 TD 1.9 TD	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
VM 488 HT (t)	88	1995	79 → 81 → 85 →	ALFETTA 2.0 TD GIULIETTA 2.0 TD ALFA 75 2.0 TD	0.68 - 0.77 0.78 - 0.87 0.88 - 0.97	0 2 1	1.42 1.52 1.62
VM 588 HT (t)	88	2494	83 →	6 TURBO TD5	0.68 - 0.77 0.78 - 0.87 0.88 - 0.97	0 2 1	1.42 1.52 1.62
VM 492 HT (t)	92	2393	83 → 89 → 84 →	ALFETTA 2.4 TD 75 2.4 TD 90 2.4 TD	0.48 - 0.57 0.58 - 0.67 0.68 - 0.77	0 2 1	1.42 1.52 1.62
VM 492 HT (t)	92	2499	93 → 87 →	155 2.5 TD 164 2.5 TD	0.38 - 0.47 0.48 - 0.57 0.58 - 0.67	0 2 1	1.42 1.52 1.62

AUDI

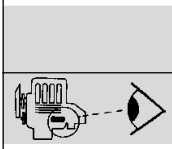
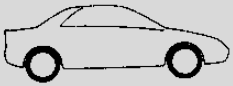
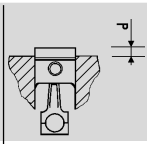
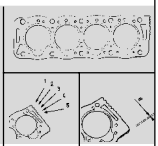
	Ø	cm³	95		P		
CR	76.5	1588	80/81	AUDI 80 1.6 D	0.67 - 0.82 0.83 - 0.92 0.93 - 1.02	1 2 3	1.40 1.50 1.60
CR - JK	76.5	1588	81/85	AUDI 80 1.6 D	0.67 - 0.82 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
JK	76.5	1588	85 →	AUDI 80 1.6 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
CY (t)	76.5	1588	82/85	AUDI 80 1.6 TD	0.67 - 0.82 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60

(t) : turbo

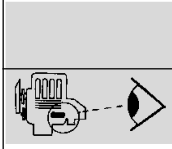
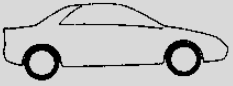
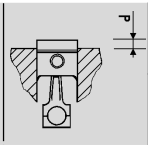
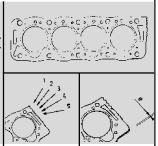
AUDI

		cm³	95				
CY - RA - SB (t)	76.5	1588	85 →	AUDI 80 1.6 TD AUDI 90 1.6 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
CN	76.5	1986	78/81	AUDI 100 - AVANT 2.0 D	0.67 - 0.82 0.83 - 0.92 0.93 - 1.02	1 2 3	1.40 1.50 1.60
CN	76.5	1986	81/85	AUDI 100 - AVANT 2.0 D	0.67 - 0.82 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
CN	76.5	1986	85 →	AUDI 100 - AVANT 2.0 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
1 Y	79.5	1896	89/91	AUDI 80 1.9 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
AAZ (t)	79.5	1896	91 →	AUDI 80 1.9 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
IZ (t)	79.5	1896	91 →	AUDI 80 1.9 TDI A4 1.9 TDI	0.91 - 1.00 1.01 - 1.10 1.11 - 1.20	1 2 3	1.45 1.53 1.61
DE (t)	76.5	1986	81/85	AUDI 100 - AVANT 2.0 TD	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
DE - NC (t)	76.5	1986	85 →	AUDI 100 - AVANT 2.0 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
3D.ASS	79.5	2370	89 →	AUDI 100 - AVANT 2.4 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61

BMW

	Ø	cm³	95		 P		
M41 (t)	80	1665	94 →	318 TDS	0.54 - 0.76 0.77 - 0.99	2 3	1.68 1.87
M21	80	2443	85 → 86 →	324 D 524 D	0.64 - 0.78 0.79 - 0.91 0.92 - 1.08	1 2 3	1.55 1.68 1.87
M21 (t)	80	2443	87 → 83 →	324 TD 524 TD	0.64 - 0.78 0.79 - 0.91 0.92 - 1.08	1 2 3	1.55 1.68 1.87
M51 (t)	80	2497	90 → 93 → 92 → 90 →	325 TD 325 TDS 525 TD 525 TDS	0.54 - 0.76 0.77 - 0.99	2 3	1.68 1.87

CITROËN

	Ø	cm³	95		 P		
TUD3	75	1360	88/94	AX 1.4 D	1,04 - 1.14	-	1.70
TUD5	77	1527	94 → 96 →	AX 1,5 D SAXO 1.5 D	1.04 - 1,14	-	1.70
XUD7	80	1769	84 → 85 → 91 →	VISA 17 D BX 17 D ZX 17 D ENTREPRISE	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD7T (t)	80	1769	88 →	BX TD	0.54 - 0.65 0.66 - 0.77 0.78 - 0.82	1 2 3	1.50 1.65 1.80

(t) : turbo

CITROËN

	Ø	cm³	95		P		
XUD9 XUD9A	83	1905	83 → 91 → 93 →	BX 1.9 D ZX 1.9 D XANTIA 1.9 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD9TE (t)	83	1905	91 → 93 → 94 →	ZX 1.9 TD XANTIA 1.9 TD EVASION 1.9 TD	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD11A	86	2138	89 →	XM D 12	0.54 - 0.65 0.66 - 0.77 0.78 - 0.82 > 0.82	1 2 3 4	1.50 1.60 1.70 1.80
XUD11ATE (t)	85	2088	89 /95 95 → 96 →	XM 2,1 TD XANTIA 2,1 TD EVASION 2.1 TD	0.54 - 0.64 0.65 - 0.76 0.77 - 0.81 0.82 - 0.86 0.87 - 0.91 0.92 - 0.96	2 T CL 1 CL 2 CL 3 CL 4 CL 5	1.43 1.52 1.57 1.62 1.67 1.72
XUD11BTE (t)	85	2088	95 → 95 → 96 →	XM 2,1 TD XANTIA 2,1 TD EVASION 2.1 TD	0.65 - 0.76 0.77 - 0.81 0.82 - 0.86 0.87 - 0.91 0.92 - 0.96	CL 1 CL 2 CL 3 CL 4 CL 5	1.52 1.57 1.62 1.67 1.72
DK5 ATE (t)	92	2446	94 →	XM 2.5 TD	0.40 - 0.50	-	1.50
M22	90	2175	75/78	CX 2200 D	0.50 - 0.55	-	1.35
M 25	93	2500	78 →	CX 2500 D	0.50 - 0.55	-	1.35
M25 (t)	93	2500	83/87 87 →	CX 25 T CX 25 T2	0.65 - 0.75	1	1.80

CITROËN

	Ø	cm³	95		P		
XUD7	80	1769	84 →	C15 D	0.56 - 0.67	1	1.36
					0.68 - 0.71	2	1.40
			96 →	BERLINGO 1.8 D	0.72 - 0.75	3	1.44
					0.76 - 0.79	4	1.48
					0.80 - 0.83	5	1.52
XUD9	83	1905	88 →	C25 1.9 D	0.56 - 0.67	1	1.36
XUD9A			94 →	JUMPER 1.9 D	0.68 - 0.71	2	1.40
			95 →	JUMPY 1.9 D	0.72 - 0.75	3	1.44
			96 →	BERLINGO 1.9 D	0.76 - 0.79	4	1.48
					0.80 - 0.83	5	1.52
XUD9TE	83	1905	94 →	JUMPER 1.9 TD	0.56 - 0.67	1	1.36
XUD9TF			95 →	JUMPY 1.9 TD	0.68 - 0.71	2	1.40
					0.72 - 0.75	3	1.44
					0.76 - 0.79	4	1.48
(t)					0.80 - 0.83	5	1.52
XT	82.6	1929	88 →	C25 1.9 TD	< 0.10	0	1.65
(FIAT)					0.10 - 0.30	1	1.80
(t)					0.30 - 0.43	2	1.95
DJ5	92	2446	94 →	JUMPER 2.5 D	0.40 - 0.50	-	1.50
DJ5T (t)	92	2446	94 →	JUMPER 2,5 TD	0.40 - 0.50	-	1.50
B22	90	2175	74/79	C32 - C35 2.2D	0.50 - 0.55	-	1.35
U25	93	2500	81 →	C25 2.5 D	0.50 - 0.55	-	1.35
B25			79 →	C35 2.5 D			
B25	93	2500	87 →	C25 2.5 TD	0.65 - 0.75	1	1.80
(t)							

(t) : turbo

FIAT

	Ø	cm³	95		P		
127 A5	76	1301	81 → 83 → 86 → 88 →	127 D 1,3 UNO D PANDA D FIORINO D	< 0.85 0.85 - 1.05 > 1.05	0 1 2	1.65 1.80 1.95
146 B3 (t)	78	1367	86 →	UNO TD 1.4	0.65 - 0.75 0.75 - 0.95 0.95 - 1.08	0 1 2	1.65 1.80 1.95
149 B3	82,6	1697	83 → 82 →	REGATA D 1.7 RITMO D	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
149 B4	82.6	1697	88 → 89 → 90 → 93 →	TIPO 1.7 D UNO 1.7 D TEMPRA 1.7 D PUNTO 1.7 D	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
176 A5 (t)	82.6	1697	93 →	PUNTO TD 1.7	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
138 B6	83	1714	80 → 83 →	RITMO D REGATA DS	< 0.55 0.55 - 0.70 > 0.70	0 1 2	1.65 1.80 1.95
149 A1	82.6	1929	83 → 90 → 91 →	REGATA DS 1.9 TEMPRA D TIPO D	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
149 A1 (t)	82.6	1929	85 →	REGATA TD 1.9	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
831 D1 (t)	82.6	1929	86 → 86 →	REGATA TD 1.9 RITMO TD	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
M707 BT 19 (t)	82.6	1929	86 →	REGATA TDS	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95

(t) : turbo

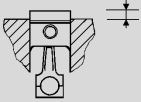
FIAT

	Ø	cm³	95		P		
160 A6 (t)	82.6	1929	88 → 90 →	TIPO TD TEMPRA TD	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
160 A7	82.6	1929	95 →	BRAVA 1.9 D BRAVO 1.9 D	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
154 B (t)	82.6	1929	88 →	CROMA TD ID 1.9	0.75 - 0.90 0.91 - 1.05 1.06 - 1.24	0 1 2	1.65 1.80 1.95
XU D9 TF (PEUGEOT) (t)	83	1905	94 →	ULYSSE 1.9 TD	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD11BTE (PEUGEOT) (t)	85	2088	96 →	ULYSSE 2.1 TD	0.65 - 0.76 0.77 - 0.81 0.82 - 0.86 0.87 - 0.91 0.92 - 0.96	CL 1 CL 2 CL 3 CL 4 CL 5	1.52 1.57 1.62 1.67 1.72
8140 61 (SOFIM)	93	2445	78 →	131 2.5 D 132 2.5 D ARGENTA 2.5 D	0.81 - 1.14	-	1.65
8144 67 (SOFIM)	93	2499	85 →	CROMA 2.5 TD	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
8144 81 (SOFIM) (t)	93	2445	83 →	ARGENTA 2.5 TD	0.81 - 1.14	-	1.65
8144 91 (SOFIM) (t)	93	2445	85 →	CROMA 2500 TD	0.76 - 0.90 0.91 - 1.09	- -	1.65 1.80
8144 97 (SOFIM) (t)	93	2499	92 →	CROMA 2.5 TD	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80

CL : classe (t) : turbo

FACOM®

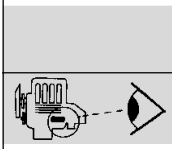
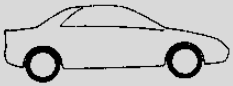
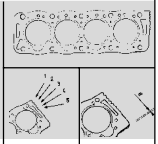
FIAT



	Ø	cm³	95				
127 A5	76	1301	88 →	FIORINO 1,3 D	< 0.85 0.85 - 1.05 > 1.05	> 1 2	1.65 1.80 1.95
149 B3	82.6	1697	88 →	FIORINO 1,7 D PENNY 1.7 D	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
M 705 BA 19	82.6	1929	88 →	DUCATO 1930 D	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
M 707 3T 19 (t)	82.6	1929	88 →	DUCATO 1930 TD	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
XUD 9A (PSA)	83	1905	95 →	SCUDO 1.9 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD 9TE (PSA) (t)	83	1905	95 →	SCUDO 1.9 TD	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
U25 / 661 (CITROËN)	93	2500	82 →	DUCATO 2.5 D	0.50 - 0.55	-	1.35
8144 61 (SOFIM)	93	2445	81/89	DUCATO 2,5 D	0.81 - 1.14	-	1.65
8144 67 (SOFIM)	93	2499	89 →	DUCATO 2.5 D	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
8144 21 (SOFIM) (t)	93	2445	85 →	DUCATO 4 X 4 TD id	0.35 - 0.65	-	1.35
8144 21 210 (SOFIM) (t)	93	2445	89 →	DUCATO 4 X 4 TD id	0.35 - 0.65	-	1.35
8144 21 200 8144 27 (SOFIM) (t)	93	2499	89 →	DUCATO 4 X 4 TD id	0.35 - 0.65 0.66 - 0.80		1.35 1.50

(t) : turbo

FORD

		cm³	95				
LT	80	1608	→ 89 → 88 → 88	FIESTA 1.6 D ESCORT 1.6 D ORION 1.6 D	0.43 - 0.62 0.62 - 0.68 0.68 - 0.74 0.74 - 0.80 0.80 - 0.86	1 2 3 4 5	1.43 1.49 1.55 1.61 1.67
RT	82.5	1753	89 → 88 → 88 → 88 →	FIESTA 1.8 D ESCORT 1.8 D ORION 1.8 D TRANSIT 1.8 D	0.50 - 0.68 0.68 - 0.74 0.74 - 0.84	2 3 4	1.36 1.42 1.52
RF (t)	82.5	1753	89 → 89 → 88 → 89 →	FIESTA 1.8 TD ESCORT 1,8 TD ORION 1.8 TD SIERRA 1.8 TD	0.50 - 0.68 0.68 _ 0.74 0.74 - 0.84	2 3 4	1.36 1.42 1.52
RFM (t)	82.5	1753	93 →	MONDEO 1.8 TD	0.50 - 0.68 0.68 - 0.74 0.74 - 0.84	2 3 4	1.36 1.42 1.52
WTA (PEUGEOT XD90)	90	2112	77/82	GRANADA 2100 D	< 0.70 > 0.70	0 1	1.40 1.58
XTR (PEUGEOT XD2)	94	2304	83/90	SIERRA 2300 D	< 0.79 0.79 - 0.89 > 0.89	2 3 4	1.53 1.63 1.73
STP (PEUGEOT XD3)	94	2498	82/86	GRANADA 2500 D SCORPIO 2500 D	< 0.84 > 0.84	2 3	1.58 1.70
STR (PEUGEOT XD3)	94	2498	86 → 86 →	GRANADA 2500 D SCORPIO 2500 D	< 0.79 0.79 - 0.89 > 0.89	2 3 4	1.53 1.63 1.73
SFA (PEUGEOT XD3T) (t)	94	2498	88 → 86 →	GRANADA 2500 TD SCORPIO 2500 TD	< 0.72 0.72 - 0.82 > 0.82	2 3 4	1.53 1.63 1.73

(t) : turbo

FACOM®

FORD

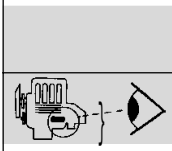
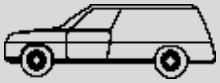
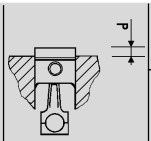
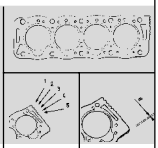
	Ø	cm³	95		P		
RT	82.5	1753	91 →	COURRIER 1.8 D	0.50 - 0.68 0.68 - 0.74 0.74 - 0.84	2 3 4	1.36 1.42 1.52
LT	80	1608	→ 88	TRANSIT 1.6 D	0.43 - 0.62 0.62 - 0.68 0.68 - 0.74 0.74 - 0.80 0.80 - 0.86	1 2 3 4 5	1.43 1.49 1.55 1.61 1.67
RF (t)	82.5	1753	89 → 89 →	P 100 TD TRANSIT	0.50 - 0.68 0.68 - 0.74 0.74 - 0.84	2 3 4	1.36 1.42 1.52
24 D IE	93.67	2360	71/85	TRANSIT 2400 D	- 0.11 + 0.21	-	0.90
M25 DT	93.67	2496	85 →	TRANSIT 2.5 D id	0.31 - 0.50	-	1.20

IVECO

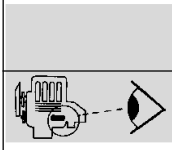
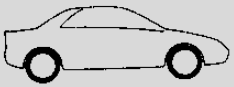
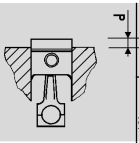
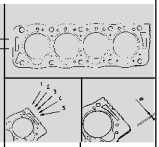
	Ø	cm³	95		P		
8140.61 (SOFIM)	93	2445	79/89	DAILY 2.5 D 28.8 30.8 32.8 35.8 40.8	0.81 - 1.14	-	1.65
8140.67 (SOFIM)	93	2499	89 →	DAILY 2.5 D 28.8 30.8 32.8 35.8 40.8	0.81 - 0.95 0.96 - 1.14	-	1.65 1.80
8140.07 (SOFIM)	93	2499	89 →	DAILY 2.5 D id 30.8 35.8 40.8	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50
8140.21 (SOFIM) (t)	93	2445	85 →	DAILY TD id 35.10 40.10 45.10 49.10	0.35 - 0.65	-	1.35
8140.21 (SOFIM) (t)	93	2499	89 →	NEW DAILY TD id 35.10 35.12 40.10 45.10 49.10 49.12	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50

(t) : turbo

IVECO

 Ø	cm³	95		 P		
8140.27 (SOFIM) (t)	93	2499	89 →	DAILY 2.5 TD id 35.10 49.10 A40.10 A45.10	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50
8140.47 INTERCOOLER (SOFIM) (t)	93	2499	91 →	DAILY 2.5 TD id 35.12 49.12 59.12	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50
8140.97 (t)	93	2499	89 →	NEW DAILY 2.5 TD 35.10	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
8140.67F (SOFIM)	93	2499	96 →	NEW DAILY 2.5 TD 30.8 35.8 40.8	< 0.85 0.85 - 0.95 0.95 - 1.05	- - -	1.60 1.70 1.80
8140.23 (SOFIM) (t)	94.4	2800	96 →	NEW DAILY 2.8 TD id 30.10 35.10 40.10 45.10 49.10	0.40 - 0.50 0.51 - 0.60 0.61 - 0.70 0.71 - 0.80	- - - -	1.20 1.30 1.40 1.50
8143.43 (SOFIM) (t)	94.4	2800	96 →	NEW DAILY 2.8 TD id 35.12 40.12 49.12 59.12	0.40 - 0.50 0.51 - 0.60 0.61 - 0.70 0.71 - 0.80	- - - -	1.20 1.30 1.40 1.50

LADA

 Ø	cm³	95		 P		
TUD5 (PSA)	77	1527	95 → 96 →	SAMARA 1.5 D SAGONA 1.5 D	1.04 - 1.14	-	1.70
XUD9	83	1905	94 →	NIVA 1.9 D 4 X 4	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52

(t) : turbo

LANCIA

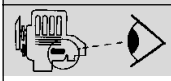
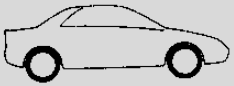
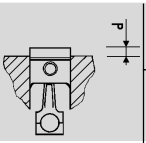
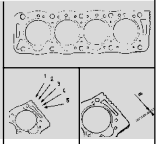
	Ø	cm³	95		P		
831 D	82.6	1929	84 →	PRISMA D 1930	< 0.30 0.30 - 0.50 > 0.50	0 1 2	1.65 1.80 1.95
831 D1 (t)	82.6	1929	85 → 86 →	PRISMA TD 1930 DELTA TD 1930	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
835 A4 (t)	82.6	1929	89 →	DEDRA 1. 9 TD	< 0.10 0.10 - 0.30 0.30 - 0.43	0 1 2	1.65 1.80 1.95
M717 AT 24T (t)	82	2387	94 →	KAPPA 2.4 TD	< 0.85 0.85 - 0.95 > 0.95	0 1 2	1.60 1.70 1.80
8144 91 (SOFIM) (t)	93	2445	85 →	THEMA 2500 TD	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
8144 97 (SOFIM) (t)	93	2449	89 →	THEMA 2.5 TURBO DS	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80

MERCEDES-BENZ

	Ø	cm³	95		P		
621.910 621.912	87 87	1988 1988	61/68 61/68	190 D 190 DC	0.70 - 1.20	-	1.80
601.911	87	1997	83/93	190 D 2.0	0.73 - 0.96	-	1.65
602.911	87	2497	85/93	190 D 2.5	0.73 - 0.96	-	1.65

(t) : turbo

MERCEDES-BENZ

		cm³					
602.961 (t)	87	2497	87/93	190 D 2.5 T	0.73 - 0.96	-	1.65
621.918	87	1988	61/88	200 D	0.70 - 1.20	-	1.80
615.913	87	1988	68/71	200 D	0.10 - 0.50	-	1,65
615.940 943 944	87	1988	78 →	200 D	0.65 - 1.05	-	1.65
601.912	87	1997	83/93	200 D	0.73 - 0.96	-	1.65
601.913	87	1997	93 →	C 200 D	0.73 - 0.96 0.96 - 1.16	- -	1.65 1.85
615.912	87	2197	68/78	220 D	0.40 - 0.70	-	1.65
604.910	89	2155	93 →	C 220 D	0.73 - 0.96 0.96 - 1.16	-	1.65
616.916	90.9	2399	73/78	240 D	0.50 - 0.90	-	1.65
616.912	90.9	2399	78 →	240 D 240 TD	0.50 - 0.90	-	1.65
616.916	91	2404	73 →	240 D	0.50 - 0.90	-	1.65
616.912	91	2404	73/78	240 TD	0.50 - 0.90	-	1.65
617.910	90.9	2998	74/79	240 D 3.0	0.50 - 0.90	-	1.65
617.910	91	3005	74/78	240 D 3.0	0.50 - 0.90	-	1.65

(t) : turbo

FACOM®

MERCEDES-BENZ

	Ø	cm³	95		P		
602.912	87	2497	85 → 87 →	250 D 250 TD	0.73 - 0.96	-	1.65
602.961 (t)	87	2497	87 →	250 D	0.73 - 0.96	-	1.65
605.910	87	2497	93 →	C 250 D	0.73 - 0.96 0.96 - 1.16	- -	1.65 1.85
603.912	87	2996	85 →	300 D	0.73 - 0.96	-	1.65
603.963 (t)	87	2996	87 →	300 TD	0.73 - 0.96	-	1.65
617.912	90.9	2998	74 → 74/79	300 D 300 TD	0.50 - 0.90	-	1.65
617.950 (t)	90.9	2998	78/79	300 TD	0.50 - 0.90	-	1.65
617.912	91	3005	74-78	300 TD	0.50 - 0.90	-	1.65

MERCEDES-BENZ

	Ø	cm³	95		P		
616.913	90.9	2399	73 →	407 D	0.50 - 0.90	-	1.65
616.937	90.9	2399	78 → 78 →	207 D 307 D	0.50 - 0.90	-	1.65
616.910 917 934	90.9	2399	74/79 74/79 74/79	L 309 D L 207 D L 307 D	0.50 - 0.90	-	1.65
616.963	90.9	2399	88 →	MB 100 D	0.50 - 0.90	-	1.65

(t) : turbo

MERCEDES-BENZ

	Ø	cm³	95		P		
617.913	90.9	2998	83 → 83 → 83 →	209 D 409 D 309 DC	0.50 - 0/90	-	1.65
617.910 917 934	91	2404	77 → 84 → 84 → 86 → 86 → 86 →	L 309 D L 207 D L 307 D L 407 D L 507 D L 510 D	0.50 - 0.90	-	1.65
621 621.919 621.913 621.915	87 87 87 87	1988 1988 1988 1988	61/68 61/68 61/68 61/68	L 319 D 0 319 D L 406 L 405	0.70 - 1.20	-	1.80
615 615 615.910	87 87 87	2197 2197 2197	68/72 68/72 68/78	L 206 D - L 306 D L 406 DG 0 309 D	0.40 - 0.70	-	1.65
615.912	87	2197	73/78 73/78	L 206 D - L 306 D L 406 DG	0.40 - 0.70	-	1.65
601.940	89	2299	88 → 88 → 88 → 90 →	208 D 308 D 408 D U 208	0.73 - 0.96	-	1.65
602.940	89	2874	88 → 88 → 88 →	210 D 310 D 410 D	0.73 - 0.96	-	1.65

(t) : turbo

NISSAN

	Ø	cm³	95		P		
CD 17	80	1681	82 →	CHERRY 1.7 D SUNNY 1.7 D SENTRA 1.7 D	< 0.52 0.52 - 0.57 > 0.57	1 2 3	1.15 1.20 1.25
CD 20	84.5	1974	91→	PRIMERA 2.0 D	< 0.505 0.505-0.555 > 0.555	1 2 3	1.15 1.20 1.25
LD 20	85	1952	84 →	BLUEBIRD VANETTE	0.45 - 0.60 0.61 - 0.75 0.76 - 0.86	1 2 3	1.15 1.20 1.25
TD 27 T (t)	96	2663	93 →	TERRANO II 2.7 TD	< 0.368 0.368-0.418 > 0.418	2 3 4	1.20 1.25 1.30
RD 28	85	2826	88 →	PATROL 2.8 D	< 0.49 0.49 - 0.575 > 0.575	1 2 3	1.12 1.20 1.28
RD28T (t)	85	2826	88 →	PATROL 2,8 TD	< 0.79 0.79 - 0.875 > 0.875	1 2 3	1.42 1.50 1.58

OPEL

	Ø	cm³	95		P		
4 EC1 (ISUZU)	76	1488	→ 93	CORSA 1.5 D KADETT 1.5 D	0.58 - 0.64 0.65 - 0.70 0.71 - 0.78	1 2 3	1.25 1.30 1.35
4 EC1 (ISUZU)	76	1488	93 →	CORSA 1,5 D	0.58 - 0.64 0.65 - 0.70 0.71 - 0.78	0 1 2	1.35 1.40 1.45
T4 EC1 (ISUZU) (t)	76	1488	→ 93	CORSA 1.5 TD KADETT 1.5 TD	0.58 - 0.64 0.65 - 0.70 0.71 - 0.78	1 2 3	1.25 1.30 1.35

OPEL

	Ø	cm³	95		P		
T4 EC1 (ISUZU) (t)	76	1488	93 →	CORSA 1.5 TD	0.58 - 0.64 0.65 - 0.70 0.71 - 0.78	0 1 2	1.35 1.40 1.45
4 EE1 (ISUZU)	79	1686	93 →	CORSA 1.7 D KADETT 1.7 D COMBO	0.58 - 0.64 0.65 - 0.70 0.71 - 0.78	0 1 2	1.35 1.40 1.45
TC4F EE1 (ISUZU) (t)	79	1686	91→	ASTRA 1.7 TD VECTRA 1.7 TD	0.58 - 0.64 0.65 - 0.71 0.72 - 0.78	1 2 3	1.45 1.50 1.55
16 DA (OPEL)	80	1598	82 →	ASCONA 1.6 D KADETT 1.6 D	< 0.75 0.75 - 0.85 > 0.85	0 1 2	1.30 1.40 1.50
17 D 17 DR (OPEL)	82,5	1699	91 → 88 → 91 →	ASTRA 1.7 D VECTRA 1.7 D KADETT 1.7 D	< 0.80 0.80 - 0.90 > 0.90	0 1 2	1.30 1.40 1.50
X17 DTL ECOTEC (OPEL)	82.5	1699	94 →	ASTRA 1.7 D	< 0.80 0.80 - 0.90 > 0.90	0 1 2	1.30 1.40 1.50
23 YD	92	2260	82 → 86 →	REKORD 2.3 D OMEGA 2.3 D	< 0.60 0.60 - 0.70 0.70 - 0.85	1 2 3	1.30 1.40 1.50
23 YTD 23 DTR (t)	92	2260	84 → 84 → 86 → 91 →	REKORD 2.3 TD SENATOR 2.3 TD OMEGA 2.3 TD FRONTERA 2.3 TD	< 0.60 0.60 - 0.70 0.70 - 0.85	1 2 3	1.30 1.40 1.50
25 TD (BMW) (t)	80	2497	94 →	OMEGA 2.5 TD	0.54 - 0.76 0.77 - 0.99	2 3	1.68 1.87

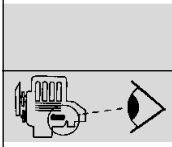
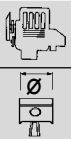
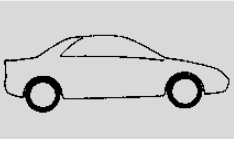
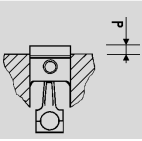
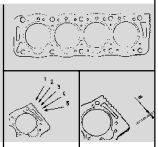
(t) : turbo

PEUGEOT

	Ø	cm³	95		P		
TUD 3	75	1360	92/94	106 1.4 D	1.04 - 1.14	-	1.70
XLD	75	1255	68/73	204 D	- 0.3 + 0.02	-	1.20
TUD 5	77	1527	94 →	106 1.5D	1.04 - 1.14	-	1.70
XL4 D	78	1357	73/77 76/79	204 D 304 D	< 0.70 > 0.70	1 2	1.40 1.60
X 1D	80	1548	79 → 79/83	304 D 305 D	0.72 - 0.94 0.95 - 1.06 1.07 - 1.16	2 3 4	1.56 1.68 1.80
XUD 7	80	1769	83 →	205 1.8 D 305 1.8 D 306 1.8 D 309 1.8 D 405 1.8 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD7T (t)	80	1769	90 → 89 → 88 →	205 1.8 TD 309 1.8 TD 405 1.8 TD	0.54 - 0.65 0.66 - 0.77 0.78 - 0.82	1 2 3	1.50 1.65 1.80
XUD9 XUD9A	83	1905	87 → 82 → 93 → 86 → 88 →	205 1.9 D 305 1.9 D 306 1.9 D 309 1.9 D 405 1.9 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0,79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD 9 TE XUD9TF (t)	83	1905	93 → 92 → 94 →	306 1.9 TD 405 1.9 TD 806 1.9 TD	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD 9 TF XUD 9 BTF XUD 9 SD (t)	83	1905	95 →	406 1.9 TD	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD 11A	86	2138	90 →	605 D	0.54 - 0.65 0.66 - 0.77 0.78 - 0.82 > 0.82	1 2 3 4	1.50 1.60 1.70 1.80

(t) : turbo

PEUGEOT

		cm³	95				
XUD11 ATE (t)	85	2088	90/95	605 2.1 TD	0.54 - 0.64 0.65 - 0.76 0.77 - 0.81 0.82 - 0.86 0.87 - 0.91 0.92 - 0.96	2 T CL 1 CL 2 CL 3 CL 4 CL 5	1.35 1.52 1.57 1.62 1.67 1.72
XUD 11 BTE (t)	85	2088	95 → 95 → 96 →	406 2.1 TD 605 2.1 TD 806 2.1 TD	0.65 - 0.76 0.77 - 0.81 0.82 - 0.86 0.87 - 0.91 0.92 - 0.96	CL 1 CL 2 CL 3 CL 4 CL 5	1.52 1.57 1.62 1.67 1.72
XD 88	88 REP X	1946	63 → 70 →	404 D 504 D	- 0.35 - 0 0 + 0.35	- -	0.65 1.20
	88 REP R	1946	63 → 70 →	404 D 504 D	0.35 - 0.70 > 0.70	- -	1.40 1.58
XD 90	90 REP X	2112	70 →	504 D	- 0.35 - 0 0 + 0.35	- -	0.65 1.20
	90 REP R	2112	70 →	504 D	0.35 - 0.70 > 0.70	- -	1.40 1.58
DK5ATE (t)	92	2446	94 →	605 2.5 TD	0.40 - 0.50	-	1.50
XD 2 INJECTEURS BRIDES	94	2304	76 → 79/81	504 D 505 D	< 0.84 > 0.84	2 3	1.58 1.70
XD2 INJECTEURS VISSES	94	2304	80 → 80/82	504 D 505 D	< 0.79 0.79 - 0.89 > 0.89	2 3 4	1.53 1.63 1.73
XD2S (t)	94	2304	81/85 78/83	505 TD 604 TD	< 0.72 0.72 - 0.82 > 0.82	2 3 4	1.53 1.63 1.73
XD3	94	2498	81 → 82 →	504 D 405 D	< 0.79 0.79 - 0.89 > 0.89	2 3 4	1.53 1.63 1.73
XD3T (t)	94	2498	83 → 83/86	505 TD 604 TD	< 0.72 0.72 - 0.82 < 0.82	2 3 4	1.53 1.63 1.73

T : trou CL : classe (t) : turbo

FACOM®

PEUGEOT

	Ø	cm³	95				
XUD7	80	1769	95 →	PARTNER 1.8 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD9A	83	1905	88 → 94 → 96 → 96 →	J5 1.9 D BOXER 1.9 D EXPERT 1.9 D PARTNER 1.9 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD9TE XUD9TF (t)	83	1905	94 → 96 →	BOXER 1.9 TD EXPERT 1.9 TD	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XD88	88 REP X	1946	66 →	J7 D	- 0.35 - 0 0 + 0.35	- -	0.65 1.20
	88 REP R	1946	66 →	J7 D	0.35 - 0.70 > 0.70	- -	
XD90	90 REP X	2112	67 →	J7 D	- 0.35 - 0 0 + 0.35	- -	0.65 1.20
	90 REP R	2112	67 → 80 →	J7 D J9 D	0.35 - 0.70 > 0.70	- -	1.40 1.58
DJ5	92	2446	94 →	BOXER 2.5 D	0.40 - 0.50	-	1.50
DJ5T (t)	92	2446	94 →	BOXER 2.5 TD	0.40 - 0.50	-	1.50
U25 (CRD93)	93	2500	81 →	J5 2.5 D	0.50 - 0.55	-	1.35

PEUGEOT

	Ø	cm³	95		P		
U25 (CRD93LS) (t)	93	2500	87 →	J5 2.5 TD	0.65 - 0.75	1	1.80
XD2P Injecteurs bridés	94	2304	77 →	J7 2.3 D	< 0.84	2	1.58
			80 →	J9 2.3 D	> 0.84	3	1.70
XD2P Injecteurs vissés	94	2304	80 →	J7 2.3 D	< 0.79	2	1.53
			80 →	J9 2.3 D	0.79 - 0.89	3	1.63
					> 0.89	4	1.73
XD3P	94	2498	83 →	J9 2.5 D	< 0.79	2	1.53
					0.79 - 0.89	3	1.63
					> 0.89	4	1.73

RENAULT

	Ø	cm³	95		P		
F8M 720	78	1595	->03/88	SUPER 5 GTD SD TD	< 0.885	2	1.65
F8M 730			->03/88	R9 TD GTD TDE	0.885-0.985	0 ou 1	1.75
			->03/88	R11 TD GTD TDE	> 0.985	3	1.85
F8M 730	78	1595	04/88->	SUPER 5 GTD - SD - TD	< 0.885	2	1.65
			04/88->	R9 TD - GTD - TDE	0.885-0.985	0 ou 1	1.75
			04/88->	R11 TD - GTD - TDE	> 0.985	3	1.85
F8Q	80	1870	90 →	CLIO 1.9 D - RL - RN - RT	< 0.868	2	1.65
			88 →	R19 TD GTD TDE RL RN- RT	0.868-1,000	0 ou 1	1.75
			95 →	MEGANE 1.9 D RL RN RT	> 1.000	3	1.85
			89 →	R21 1.9 D SD GSD			
F8QT (t)	80	1870	90 →	R19 TD DX RN RT S	< 0.073	2	1.40
			96 →	MEGANE 1.9 TD RN RN	0.073-0.206	1	1.50
				RXE SCENIC	> 0.206	3	1.60

(t) : turbo

RENAULT

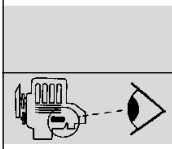
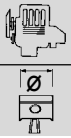
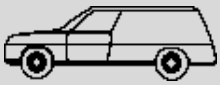
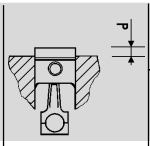
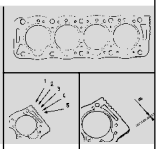
	Ø	cm³	95		P		
J8S (852)	86	2068	80 →	R18 TD - GTD	< 0.96	1	1.60
			79/84	R20 TD - GTD	0.96 - 1.04	0	1.70
			86 →	R21 TD - GTD	> 1.04	2	1.80
			84 →	R25 TD - GTD			
			82 →	JEEP LAREDO - CHEROKEE			
J8S (852) (t)	86	2068	84 →	R18 TD	< 0.96	1	1.60
			83/84	FUEGO TD	0.96 - 1.04	0	1.70
			79/84	R20 TD	> 1.04	2	1.80
			86 →	R21 TD - DX			
			84 →	R25 TD - DX			
			81/84	R30 TD			
			92 →	SAFRANE 2.1 TD - RN - RT			
			84 →	ESPACE TD - DX			
G8T	87	2188	94 →	LAGUNA RN - RT - RXE	Cyl 1 : 0.115 Cyl 2 : 0.125 Cyl 3 : 0.130 Cyl 4 : 0.095	-	1.75
S8U (SOFIM 8144-97) (t)	93	2499	92 →	SAFRANE 2.5dt RN RT RXE	0.35 - 0.65	-	1.65
					> 0.65	-	1.80

RENAULT

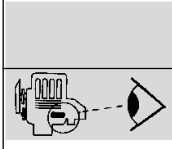
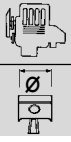
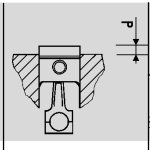
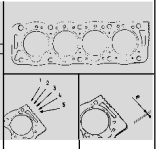
	Ø	cm³	95		P		
F8M 720 F8M 730	78	1595	->03/88	EXPRESS F404 1.6 D	< 0.885	2	1,65
					0.885-0.985	0 ou 1	1.75
					> 0.985	3	1.85
F8M 730	78	1595	04/88	EXPRESS F404 1.6 D	< 0.885	2	1,65
					0.885-0.985	0 ou 1	1.75
					> 0.985	3	1.85
F8Q	80	1870	91 →	EXPRESS 1.9 D (F40E/N/P/R)	< 0.868	2	1.65
					0.868-1,000	0 ou 1	1.75
					> 1,000	3	1.85

(t) : turbo Cyl : cylindre

RENAULT VU

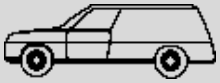
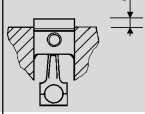
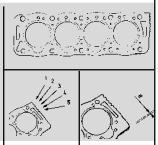
		cm³	95				
J8S (852)	86	2068	82 → 87 →	MASTER R3 TRAFIC P3 T3 V3 4 X4	< 0.96 0.96 - 1.04 > 1.04	1 0 2	1.60 1.70 1.80
S8U (SOFIM 8140-67)	93	2445	79 → 81/12.88	TRAFIC P4 MASTER QU - R4	0.81 - 1.14	-	1.65
S8U (SOFIM 8140-61)	93	2445	1.89 →	MASTER QU - R4	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
S8U (SOFIM 8140.67)	93	2499	89 → 89 →	TRAFIC T4-V4-4x4-TB-VB MASTER R4-R6-RG	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
S9U (SOFIM 8140.27)(t)	93	2499	81 →	MASTER RC-R4-RJ-R5-R7	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50

R V I

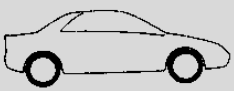
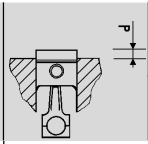
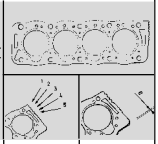
		cm³	95				
8140.61 (SOFIM)	93	2445	->12.88	B70	0.81 - 1.14	-	1.65
8140-61 (SOFIM)	93	2445	01.89->	B70	0.81 - 0.95 0.96 - 1.14	- -	1.65 1.80
8140-07 (SOFIM)	93	2499		B80	0.35 - 0.65	-	1.35
8140-21 (SOFIM) (t)	93	2445	->12.88	B90	0.35 - 0.65	-	1.35
8140-21 (SOFIM) (t)	93	2445	01.89->	B90	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50

(t) : turbo

RVI

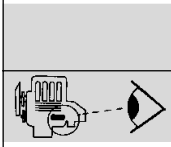
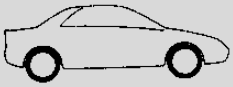
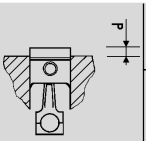
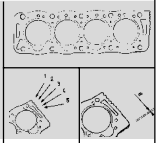
	Ø	cm³	95				
8140-27 (SOFIM) (t)	93	2499	90 →	B110	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50
8140-47 (SOFIM) (t)	93	2499	92 →	B120	0.35 - 0.65 0.66 - 0.80	- -	1.35 1.50

ROVER

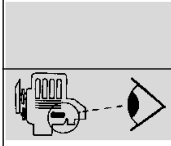
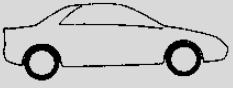
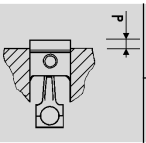
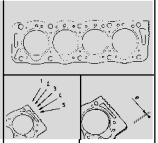
	Ø	cm³	95				
TUD3 (K9A) (PSA)	75	1360	92 →	114 LD - GSD	1.04 - 1.14	-	1.70
TUD5 (PSA)	77	1527	96 →	115 SD - GSD	1.04 - 1.14	-	1.70
XUD7TE (A8A) (PSA) (t)	80	1769	91 →	218 SDT - SLDT 418 SDT - GSTD	0.65 - 0.77 0.77 - 0.82	2 3	1.65 1.80
XUD9A (D9B) (PSA)	83	1905	94 →	218 D - SD	0,56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
20T2N (t)	84.5	1994	95 →	620 DI - SDI	0.23 - 0.35 0.36 - 0.50 0.51 - 0.65	1 2 3	1.05 1.20 1.35
VM 492 HT (VM) (t)	92	2393	82/86	2400 D - SDT	0.48 - 0.57 0.58 - 0.67 0.68 - 0.77	0 2 1	1.42 1.52 1.62
VM 492 HS (VM) (t)	92	2500	91 →	825 D - SDT	0.53 - 0.62 0.63 - 0.72 0.73 - 0.82	0 2 1	1.42 1.52 1.62

(t) : turbo

LAND ROVER / RANGE ROVER

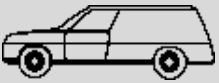
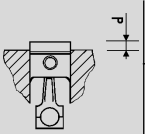
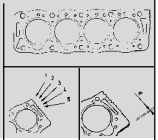
		cm³					
11L - 12 L - 16 L 18 L - 20 L (t)	90,5	2495	90 →	DISCOVERY TDI DEFENDER TDI	0.50 - 0.60 0.61 - 0.70 0.71 - 0.80	1 2 3	- - -
VM 492 HT (VM) (t)	92	2383	86 →	2400 DT	0.48 - 0.57 0.58 - 0.67 0.68 - 0.77	0 2 1	1,42 1.52 1.62
VM 492 HT (t)	92	2500	92 →	2500 DT	0.53 - 0.62 0.63 - 0.72 0.73 - 0.82	0 2 1	1.42 1.52 1.62
12 L - 16 L 18 L - 20 L (t)	90.5	2495	94 →	2500 TDI	0.50 - 0.60 0.61 - 0.70 0,71 - 0,80	1 2 3	- - -

SEAT

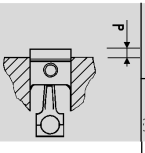
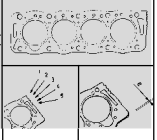
		cm³					
138B6 (FIAT)	83	1714	84 → 84 → 84 →	MALAGA 1.7 D RONDA 1.7 D IBIZA 1.7 D	< 0.55 0.55 - 0.70 > 0.70	0 1 2	1.65 1.80 1.95
1Y (VW)	79.5	1896	92 → 93 → 93 →	TOLEDO 1.9 D CORDOBA 1.9 D IBIZA 1.9 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
AAZ (VW) (t)	79.5	1896	92 → 93 → 93 →	TOLEDO 1.9 TD CORBODA 1.9 TD IBIZA 1.9 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
IZ (VW) (t)	79.5	1896	95 → 96 →	TOLEDO 1.9 TDI ALHAMBRA 1.9 TDI	0.91 - 1.00 1.01 - 1.10 1.11 - 1.20	1 2 3	1.45 1.53 1.61

(t) : turbo

SEAT

	Ø	cm³	95				
MN (VW)	75	1272	90 →	TERRA 1.3 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.01	1 2 3	1.53 1.57 1,61
1W (VW)	75	1398	90 →	TERRA 1.4 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.01	1 2 3	1.53 1.57 1,61
138 B6 (FIAT)	83	1714	84 →	TERRA 1.7 D	< 0.55 0.55 - 0.70 < 0.70	0 1 2	1.65 1.80 1.95

TALBOT

	Ø	cm³	95				
XUD7 (PSA)	80	1769	84/86	HORIZON 1.8 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1.36 1.40 1.44 1.48 1.52
XUD9 (PSA)	83	1905	83/86	HORIZON 1.9 D	0.56 - 0.67 0.68 - 0.71 0.72 - 0.75 0.76 - 0.79 0.80 - 0.83	1 2 3 4 5	1,36 1.40 1.44 1.48 1.52
U8 (XD2S) (t)	94	2304	82/83	TAGORA 2.3 DT	< 0.72 0.72 - 0.82 > 0.82	2 3 4	1.53 1.63 1.73

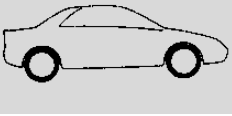
(t) : turbo

VOLKSWAGEN

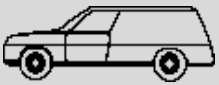
	Ø	cm³	95				
NM	75	1272	87/90	POLO 1.3 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.01	1 2 3	1.53 1.57 1.61
1W	75	1398	90/95	POLO 1.4 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.01	1 2 3	1.53 1.57 1.61
CK	76.5	1471	76/80 77/80	GOLF 1.5 D PASSAT 1.5 D	0.43 - 0.63 0.64 - 0.82 0.83 - 0.92 0.93 - 1.02	2 3 4 5	1.30 1.40 1.50 1.60
CR	76.5	1588	80/81	GOLF 1.6 D JETTA 1.6 D PASSAT 1.6 D	0.67 - 0.82 0.83 - 0.92 0.93 - 1.02	1 2 3	1.40 1.50 1.60
CR - JK - JP - ME	76.5	1588	81/85	GOLF 1.6 D JETTA 1.6 D PASSAT 1.6 D SANTANA 1.6 D CADDY 1.6 D	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
CR - JK - JP - ME	76.5	1588	85 →	GOLF 1.6 D JETTA 1.6 D PASSAT 1.6 D CADDY 1.6 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
CY - JR (t)	76.5	1588	→ 85	GOLF 1.6 TD JATTA 1.6 TD PASSAT 1.6 TD SANTANA 1.6 TD	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
CY - JR - MF RA - SB - 1V (t)	76.5	1588	85 →	GOLF 1.6 TD JETTA 1.6 TD PASSAT 1.6 TD SANTANA 1.6 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
1Y	79.5	1896	91 →	GOLF 1.9 D PASSAT 1.9 D VENTO 1.9 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
AAZ (t)	79.5	1896	91 →	GOLF 1.9 TD PASSAT 1.9 TD VENTO 1.9 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61

(t) : turbo

VOLKSWAGEN

	Ø	cm³	95		P		
IZ (t)	79.5	1896	91 →	GOLF TDI PASSAT TDI VENTO TDI	0.91 - 1.00 1.01 - 1.10 1.11 - 1.20	1 2 3	1.45 1.53 1.61
AEF	79.5	1896	95 →	POLO 1.9 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1,53 1.57 1.61
AEY	79.5	1896	95 →	POLO 1.9 D id GOLF 1.9 D id	0.91 - 1.00 1.01 - 1.10 1.11 - 1.20	1 2 3	1.45 1.53 1.61

VOLKSWAGEN

	Ø	cm³	95		P		
CS	76.5	1588	→ 81	TRANSPORTER T2 1.6 D	0.67 - 0.82 0.83 - 0.92 0.93 - 1.02	1 2 3	1.40 1.50 1.60
CS	76.5	1588	81/85	TRANSPORTER T2 1.6 D	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
CS	76.5	1588	85 →	TRANSPORTER T2 1.6 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
JX (t)	76.5	1588	→ 85	TRANSPORTER T2 1.6 TD	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
JX (t)	76.5	1588	85 →	TRANSPORTER T2 1.6 TD	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
KY	79.5	1715	86 →	TRANSPORTER T2 1.7 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61

(t) : turbo

VOLGSWAGEN

	Ø	cm³	95		P		
1X	79.5	1896	90 →	TRANSPORTER T4 1.9 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
AAB	79.5	2370	90 →	TRANSPORTER T4 2.4 D	0.66 - 0.86 0.87 - 0.90 0.91 - 1.02	1 2 3	1.53 1.57 1.61
CP	76.5	2383	78/82	LT 28 D - 31 D - 35 D 40 D - 45 D	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.50 1.55 1.60
DW.1S	76.5	2383	83/92	LT 28 D - 31 D - 35 D 40 D - 45 D - 50 D 55 D	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.50 1.55 1.60
DV.1G (t)	76.5	2383	83 →	LT 28 TD - 31 TD 35 TD40 TD - 45 TD 55 TD - 50 TD	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.50 1.55 1.60
CG (PERKINS 4.165)	92	2710	76/82	LT 28 D - 31 D - 35 D	- 0.08 /+ 0.05		

VOLVO

	Ø	cm³	95		P		
D20 (VW)	76.5	1986	79/81	244 GLD 2.0 D	0.67 - 0.82 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60
D24 (VW)	76.5	2383	78 → 78 → 84 → 84 →	244 GLD6 2.4 D 245 GLD6 2.4 D 740 2.4 D 760 2.4 D	0.67 - 0.80 0.81 - 0.90 0.91 - 1.02	1 2 3	1.40 1.50 1.60

(t) : turbo

VOLVO

	Ø	cm³	95		P		
D24T / TD	76.5	2383	82 →	740 2.4 TD	0.67 - 0.80	1	1.40
			82 →	760	0.81 - 0.90	2	1.50
(VW)			85 →	780	0.91 - 1.02	3	1.60
			90 →	940			
(t)			90 →	960			
D24 TIC	76.5	2383	82 →	740 2.4 TD	0.67 - 0.80	1	1.50
(VW)			82 →	760	0.81 - 0.90	2	1.55
			85 →	780	0.91 - 1.02	3	1.60
			90 →	940			
(t)			90 →	960			
D16	78	1595	84 →	340 1.6 D	< 0.885	2	1.65
(RENAULT) F8M				360	0.88 -0.985	0 ou 1	1.75
					> 0.985	3	1.85
F8QT	80	1870	94 →	440 1.9 TD	< 0.073	2	1.40
(RENAULT)			94 →	460 1.9 TD	0.073-0.206	1	1.50
(t)					> 0.206	3	1.60

(t) : turbo

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